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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,100	02/05/2002	Seiji Tada	F-7312	5740

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EXAMINER

HANSEN, COLBY M

ART UNIT	PAPER NUMBER
3682	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,100

Applicant(s)

TADA, SEIJI

Examiner

Colby Hansen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7 and 10 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 9 and 11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Miyake (US Pat. 5,522,667).

Miyake (US Pat. 5,522,667) discloses a ball bearing comprising a pair of bearing rings, concentrically disposed such that a first bearing ring of said pair, having a first radius, and a second bearing ring of said pair, having a second radius, said second radius being greater than said first radius, are positioned such that said first bearing ring is radially inward of said second bearing ring; an annular cage positioned between said first and second bearing rings, said annular cage having a plurality of cylindrical through pockets positioned around a circumference thereof, each said through pocket being oriented in a radial direction through said circumference of said annular cage; and a plurality of balls, corresponding in number to a number of said through pockets in said circumference of said annular cage, such that each ball is housed in a corresponding one of said through pockets, wherein said annular cage is guided by one of said bearing rings, said bearing having a guide clearance $t_{14}(\text{min,max})$ of 2% to 15% of the ball bearing diameter and pocket clearance $t_{15}(\text{min,max})$ of 15% of the ball bearing diameter (the ranges overlap the claim limitation set forth between alpha and beta of applicant's invention), such that if said annular cage becomes off-centered with respect to said first and second bearing

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rings, an inside wall surface of each said pocket in said annular cage does not interfere with said corresponding ball in said pocket (applicants' limitation that the annular cage does not interfere with said corresponding ball in said pocket is a functional limitation, therefore Miyake (US Pat. 5,522,667) must only be capable of fulfilling said broad function, which it is capable of).

Allowable Subject Matter

Claims 5-7 and 10 are allowed.

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments, see page 1, line 1 to page 2, line 9 of the remarks, filed 1/13/2005, with respect to the 35 USC 112, 2nd paragraph rejection have been fully considered and are persuasive. The rejection of claims 1-12 (with respect to the 35 USC 112, 2nd paragraph rejection) has been withdrawn.

Applicant's arguments filed 1/13/2005 have been fully considered but they are not persuasive.

Applicant argues Examiner's interpretation with regard to the inherency of Miyake (US Pat. 5,522,667) to possess eccentricity and rattling tolerances. Examiner's interpretation was based upon the unclear nature of the recitation of said limitation, as was represented by the

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newly removed 35 USC 112, 2nd paragraph rejection. Said limitations are still deemed unclear, but given that they have been removed, the argument is moot.

Applicant argues that Examiner's concession that Miyake (US Pat. 5,522,667) did not "disclose an annular cage being guided by...", is an admission of non-compliance of the 35 USC 102 (b) rejection. Examiner disagrees, as the additional rejection was merely covering the fact that an explicit recitation of such a feature was not set forth, but given the newly explained interpretation that since Miyake (US Pat. 5,522,667) discloses a guide clearance (min,max) and pocket clearance (min,max) with structural relationship ranges that overlap those set forth by applicant (with respect to alpha and beta).

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9306**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 872-9306) on _____
(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

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Conclusion

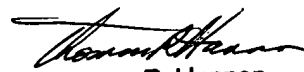
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (703) 305-1036. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on (703) 308-3668. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen

Patent Examiner

 3-21-05


Thomas R. Hannon
Primary Examiner